NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Subpart J of Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Overview

Universal Serial Bus (USB) and IEEE 1394 (FireWire) port technology have emerged in response to the proliferation of external peripheral devices (keyboards, mice, scanners, digital cameras, removable drives, etc.), that are increasingly being connected to the latest generation of computers.

USB and FireWire are much faster than conventional bus ports. Since USB and FireWire devices do not require IRQs, the problem of IRQ conflict is eliminated so that many more devices can easily be attached to the system.

The PC-220 is a PC Card 2-port USB 2.0 / 2-port IEEE 1394 host interface controller that represents the perfect way to add four high speed ports (two USB 2.0 / two 1394) to standard notebook computers. The USB and 1394 peripherals can be used simultaneously.

Installation is quick and easy, simply slide the PC-220 into your notebook's Type II CardBus slot, and you're ready to enjoy the convenience, speed, and reliability of today's modern bus technology.

The PC-220 offers the advantages of high-speed data throughput, (480Mbps for USB 2.0; 400 Mbps for 1394); the ability to daisy chain numerous peripheral devices; *Plug and Play*; hot-swapping and the latest PC Cardbus energy specifications. In addition, the PC-220 is backward compatible to USB 1.1 and can be installed in USB 1.1 systems.

Features

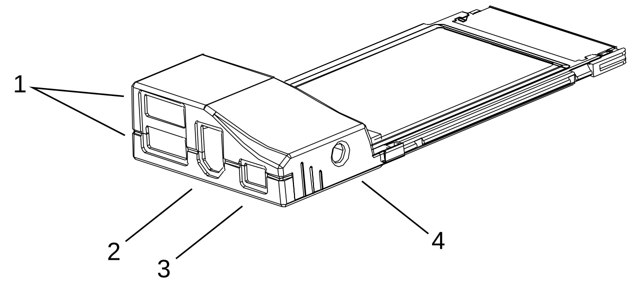
- Adds 2 USB 2.0 ports plus 2 IEEE 1394 (FireWire) ports to a PC notebook
- Hot Pluggable for all USB and 1394/1394a devices
- USB 2.0 compliant - data transfer rates up to 480Mbps
- Fully forward and backward compatible with USB 1.1
- 1394a compliant - supports data transfer rates of 100, 200, 400 Mbps
- Automatically switches to the peripheral's highest supported speed
- USB 2.0 and 1394 peripherals can be used simultaneously
- USB 2.0 and 1.1 peripherals can be used simultaneously
- Compatible with Windows Me/ 98SE/2000/XP
- Supports 32-bit CardBus PC Card Type II Slot.
- OHCI and EHCI Compliant
- Hot-pluggable with full Plug-and-Play support
- Easy Installation

System Requirements

- Windows Me/ 98SE/2000/XP
- A Type II CardBus PC Card slot

Note: High USB 2.0 transfer speeds of up to 480 Mbps can only be obtained with USB 2.0 driver support.

Components



1. USB Type A Ports
   The cables from your USB peripherals can plug into either port.
2. 6 pin FireWire Port
   6 pin cables from your FireWire peripherals plug in here.
3. 4 pin FireWire Port
   4 pin cables from your FireWire peripherals plug in here.
4. DC Input Jack
   If you choose to use a DC Power Adapter (supplied with this package), its cable plugs in here

   Note: Ordinarily, the hub gets its power from the computer, but if large, or power hungry peripherals are connected, this might not be sufficient, and may result in erratic operation. If this occurs, the DC Power Adapter should be used.

Installation

The drivers for the PC-220 need to be installed before you can use the card. To install the drivers, do the following:

1. Before inserting the PC-220 into the CardBus slot, put the driver CD that came with your card into the CD-ROM drive.
2. Open Windows Explorer and double click the icon that represents your CD-ROM drive.
3. Double click the icon for the exe file that starts the driver installation program.
4. Follow along with the dialog boxes as they appear, clicking **Next** to move on from one to the next.
5. After the driver files have been copied to the hard disk, a dialog box appears to tell you that the installation has finished. Select the *restart your computer* option, then Click on **Finish**.

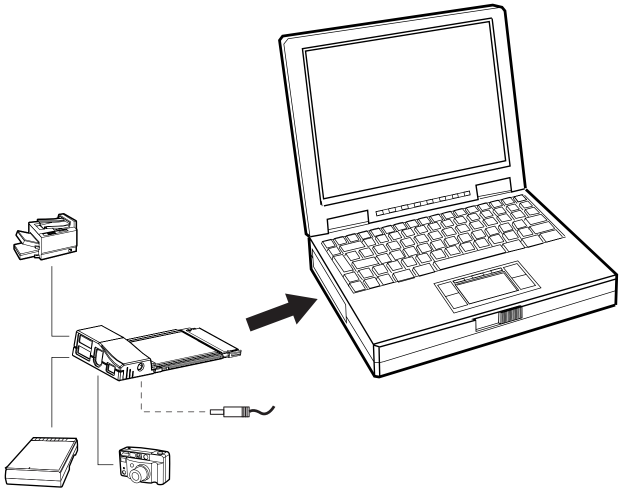
   After Windows reboots, you can use your card at any time.

Operation

With your computer up and running:

1. If you choose to use the optional DC Power Adapter, plug the DC Adapter into an AC source, then plug the Adapter cable into the DC Jack.

   Note: You must do this ***before*** inserting the PC-220 into the notebook.
2. Slide the PC-220 into the notebook's Type II CardBus slot.
3. Plug your USB and IEEE 1394peripherals into any available port.



Specifications

Function		Specification
Connectors	USB	2 x USB 2.0 Type-A
	IEEE 1394	1 x 6 pin 1 x 4 pin
	Power In	1 x DC Jack
	CardBus	1 x 68 pin
Transfer Rate	USB	USB: 1.5 / 12 / 480 Mbps
	IEEE 1394	IEEE 1394: 100 / 200 / 400 Mbps
Specs	USB	2.0 and 1.1 Compatible
	IEEE 1394	1394 / 1394a Compatible
DC Input		5V, 2.6A
Environment		Operating Temp: 5 ~ 40°C Storage Temp: -20 ~ 60°C Humidity: 0 ~ 80% RH, Noncondensing
Housing		Plastic / Metal Plate
Weight		50g
Dimensions (L x W x H)		115.5 x 54 x 13.8 mm

Limited Warranty

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK, OR ITS DOCUMENTATION EXCEED THE PRICE PAID FOR THE PRODUCT.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

USB 2.0 IEEE 1394 CARDBUS HOST CONTROLLER



User Manual

PC-220

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit, and/or any of the devices connected to it.

This package contains:

- 1 PC-220 USB 2.0/IEEE 1394 Cardbus Host Controller
- 1 Driver disk
- 1 Power Adapter
- 1 User Manual

If anything is damaged or missing, contact your dealer.

Manual Part No. PAPE-1228-1AT
Printed in Taiwan 04/2003